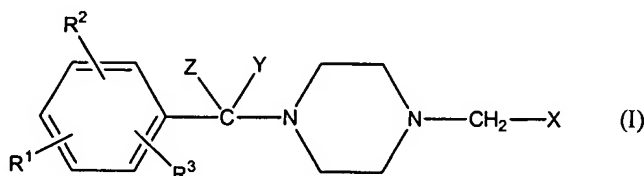


In the Claims

1. (Previously Presented) A method for treatment of a mammal threatened or afflicted by Alzheimer's disease, by administering to said mammal an effective amount of a compound of formula I:



wherein:

a) R¹, R² and R³ are individually H, OH, halo, (C₁-C₆)alkyl, (C₁-C₆)alkoxy, (C₃-C₆)cycloalkyl, (C₃-C₆)cycloalkyl((C₁-C₆)alkyl), (C₂-C₆)alkenyl, (C₂-C₆)alkynyl, (C₁-C₆)alkanoyl, halo(C₁-C₆)alkyl, hydroxy(C₁-C₆)alkyl, (C₁-C₆)alkoxycarbonyl, (C₁-C₆)alkylthio, thio(C₁-C₆)alkyl, (C₁-C₆)alkanoyloxy, N(R⁶)(R⁷) wherein R⁶ and R⁷ are individually H, O, (C₁-C₆) alkyl, (C₃-C₆)cycloalkyl, (C₃-C₆)cycloalkyl(C₁-C₆)alkyl, phenyl or benzyl, or R⁶ and R⁷, together with the N to which they are attached form a 5- or 6-membered ring, optionally comprising 1-2 S, N(R⁶) or nonperoxide O, or R¹ and R² together are methylenedioxy;

b) Y and Z together are =O, -O(CH₂)_mO- or -(CH₂)_m- wherein m is 2-4, or Y is H and Z is OR⁹ or SR⁹, wherein R⁹ is H or (C₁-C₄)alkyl;

c) X is (C₁-C₆)alkyl, (C₁-C₆)alkoxy, hydroxyl(C₁-C₆)alkyl (C₃-C₁₂)alkenyl, (C₂-C₆)alkynyl, carboxy, (C₁-C₆)alkoxycarbonyl, thio(C₁-C₆) alkyl, (C₃-C₁₂)heterocyclo, (C₃-C₁₂) heterocycloalkyl(C₁-C₆) alkyl, aryl or heteroaryl, optionally substituted by 1, 2 or 3 R¹;

and the pharmaceutically acceptable salts thereof.

2. (Original) The method of claim 1 wherein the amount is effective to inhibit A β peptide-induced neurotoxicity.

3. (Previously Presented) The method of claim 1 wherein the amount is effective to inhibit A β ₁₋₄₂ neurotoxicity.

4. (Previously Presented) The method of claim 1 wherein the amount is effective to inhibit glutamate-induced neurotoxicity in said mammal.
5. (Previously Presented) The method of claim 1 wherein the amount is effective to maintain ATP levels in neuronal cells in said mammal.
6. (Original) The method of claim 5 wherein the cells are contacted *in vitro*.
7. (Original) The method of claim 5 wherein the cells are contacted *in vivo*.
8. (Previously Presented) The method of claim 1 wherein the compound of formula I is administered to a human.
9. (Original) The method of claim 8 wherein the human is in an early stage of AD.
10. (Original) The method of claim 8 wherein the human is an AD patient.
11. (Previously Presented) The method of claim 1 wherein R^1 , R^2 or R^3 is $N(R^6)(R^7)$.
12. (Previously Presented) The method of claim 1 wherein R^2 is (C_1-C_6) alkoxy.
13. (Previously Presented) The method of claim 1 wherein R^3 is (C_1-C_6) alkoxy.
14. (Previously Presented) The method of claim 1 wherein each of R^1 , R^2 and R^3 is (C_1-C_3) alkoxy.
15. (Previously Presented) The method of claim 1 wherein Y and Z together are =O.

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16. (Previously Presented) The method of claim 1 wherein Y is H and Z is OH.
 17. (Previously Presented) The method of claim 1 wherein X is (C₁-C₆)alkyl.
 18. (Previously Presented) Method of claim 1 wherein X is CH₃.
 19. (Previously Presented) The method of claim 1 wherein the compound of formula I is administered orally.
 20. (Previously Presented) The method of claim 1 wherein the compound of formula I is administered parenterally.
 21. (Previously Presented) The method of claim 1 wherein the compound of formula (I) is administered in combination with a pharmaceutically acceptable carrier.
 22. (Original) The method of claim 21 wherein the carrier is a liquid, suspension or gel.
 23. (Original) The method of claim 21 wherein the carrier is a solid.
 24. (Previously Presented) The method of claim 1 wherein the compound of formula I is [(2,3,4-trimethoxy)phenyl]-[4-ethylpiperazin-1-yl] methanone.
 25. (Original) A composition comprising a compound of formula (I) in combination with a pharmaceutically-acceptable carrier.
 26. (Original) A therapeutic method to treat a neuropathy that involves a glutamate network or pathway hyperactivity comprising administering to a mammal threatened with, or afflicted by, said neuropathy, an effective amount of a compound of formula (I).

SUPPLEMENTAL PRELIMINARY AMENDMENT

Serial Number: 10/599,952

Filing Date: October 13, 2006

Title: USE OF (4-ALKYLPYPERAZINYL)(PHENYL) METHANONES IN THE TREATMENT OF ALZHEIMER'S DISEASE

Page 6

Docket No: 1941.001US1

27. (Canceled)